

The claims of Eidelman '519 recite a method for neutralizing a mine or unexploded ordnance comprising reacting a reactive compound that undergoes a self-propagating high temperature synthesis (SHS) reaction. The reactive compound is an essentially stoichiometric combination of sulfur and a metal selected from the group consisting of zirconium, chromium, indium, titanium, manganese, iron, and blends thereof. In contrast, pending claims 1-7 specify that the reactive compound is an essentially stoichiometric combination of sulfur and a metal selected from the group consisting of zirconium, chromium, indium, titanium, manganese, iron, and blends thereof or an essentially stoichiometric combination of carbon and a metal selected from the group consisting of hafnium, zirconium, titanium, silicon, and blends thereof.

The Office Action cites Holt as describing Ti, B, C, Ta, Al, Se, Zr, Mg, Ni, W, Cr, and Hf, as exoergic materials which react to release relatively large quantities of energy and which are capable of sustaining a self-propagating combustion synthesis reaction (column 5, lines 31-36). Holt discloses that the materials capable of sustaining the combustion synthesis reaction should result in a "useful product" such as ceramics, intermetallics, and composites of ceramics and intermetallics and/or metallic phases (column 6, lines 53-55). Sulfides are listed among several types of refractory materials that result from the combustion synthesis reaction and make up the so-called "useful product."

The Office Action contends that Holt suggests "sulfur with zirconium and/or titanium reactive compound and carbon with hafnium, zirconium, titanium, and/or silicon reactive compound are known SHS reaction equivalents." Applicants respectfully disagree. Holt is concerned with preparing a formed body 7 from exoergic materials (see Fig. 1). Sulfur is not mentioned among the exoergic materials at column 5, lines 35-36. Rather, sulfides are included among several examples of the so-called "useful product" formed from the combustion synthesis reaction. In any event, nothing in Holt suggests that (1) an essentially stoichiometric combination of carbon and a metal selected from the group consisting of hafnium, zirconium, titanium, silicon, and blends thereof, and (2) an essentially stoichiometric combination of sulfur and a metal selected from the group consisting of zirconium, chromium, indium, titanium, manganese, iron, and blends thereof, would have been known equivalents in the particularly claimed method in claims 1-7, as the Office Action contends.

The Office Action fails to show *prima facie* that pending claims 1-7 would have been obvious over the claims of Eidelman '519 in view of Holt. Reconsideration and withdrawal of the obviousness-type double patenting rejection are respectfully requested.

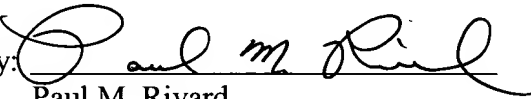
CONCLUSION

In view of the foregoing, favorable reconsideration and allowance of the subject application are respectfully requested.

Respectfully submitted,

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